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RM-R800E 80 GHz SERIES RADAR LEVEL TRANSMITTER

[Data sheet](#)

4–20 mA / RS485 / Bluetooth

Radar Level Transmitter

RM-R800E 80 GHz

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Data sheet Model RM-R800E

Application Areas

Water and Wastewater Management
Environmental Monitoring & Hydrology
Civil Infrastructure & Municipal Services
Agriculture
Open Channels
Rainwater Basins
Dams and Reservoirs
Simple Industrial Liquid Storage

Features

- Measured Product: Liquids
- Measurement Range Options: 15 m
- Process Connection: G Threaded or Flange
- Cable Entry: M12 x 1.5 (F)
- Electronics / Output: Two-wire 4...20mA_i/ MODBUS, or Wireless Bluetooth
Four wire 4-20mA or RS485 (select one of)

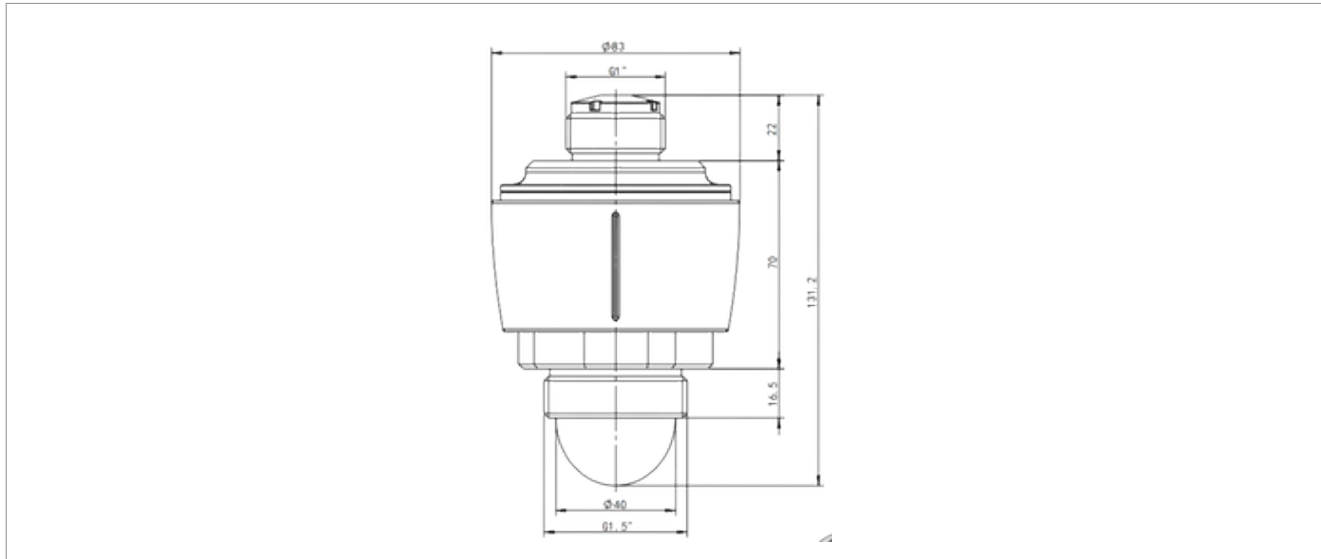
Description

The RM-R800E is a high-performance radar level transmitter designed for precision liquid measurement, operating within a frequency range of 77GHz to 81GHz. This advanced sensor offers a maximum measuring range of 30 meters with a high degree of accuracy of $\pm 2\text{mm}$, ensuring reliable data even in complex industrial environments. Built with a durable Polypropylene (PP) or PVDF housing, it supports various process connections and is capable of operating in temperatures ranging from -40°C to 80°C under normal atmospheric pressure.

To ensure optimal performance, proper installation is critical to avoid signal interference from internal tank structures like staircases or grilles. The device should be mounted vertically to direct its narrow $\pm 3.5^{\circ}$ beam angle straight toward the liquid surface, as angling the sensor or placing it near obstructions can result in false echoes or signal loss. With versatile signal outputs including 4-20mA, RS485, and Bluetooth, this radar transmitter provides a seamless integration solution for modern monitoring systems.



Structure



TECHNICAL FEATURES

Operating Frequency	77GHz - 81GHz
Measurement Range	30 M
Measurement Accuracy	±2 mm (for liquids)
Beam Angle	±3.5°
Material	PP (PolyPropylene)
Process Connection	Thread or Optional flange DN and ANSI (customized)
Process Temperature	-40°C to 80°C
Process Pressure	Normal atmospheric pressure
Signal output	4-20mA / RS485/ Bluetooth
Protection Class	Two-wire DC 24V (22V~30V)
Power supply	IP67
Dimensions	83mm x 128mm
Weight	0,5 Kg (depends on the connection type)
Communication	Bluetooth

Radar Level Transmitter

RM-R800E 80 GHz

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RM-R800E / - - - - - - - -

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1 Measured Product

Water / Liquids	<input checked="" type="checkbox"/>	W
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2 Measurement Range

10 m	<input checked="" type="checkbox"/>	10
20 m	<input type="checkbox"/>	20
30 m	<input type="checkbox"/>	30

3 Process Connection

G " Thread	<input checked="" type="checkbox"/>	G
Flange	<input type="checkbox"/>	F

4 Process temperature

-40...+80°C	<input checked="" type="checkbox"/>	N
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5 Cable Entry

M12 x1.5 (F)	<input checked="" type="checkbox"/>	M
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6 Electronic

Two-wire 4...20mA	<input checked="" type="checkbox"/>	T
MODBUS	<input type="checkbox"/>	M
Wireless Bluetooth	<input type="checkbox"/>	B

7 Protection

IP 67	<input checked="" type="checkbox"/>	P
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8 Cable length

1	<input checked="" type="checkbox"/>	1
2	<input type="checkbox"/>	2
5	<input type="checkbox"/>	5
10	<input type="checkbox"/>	10

Contact us

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